AMENDMENTS TO THE CLAIMS

The claims in this listing will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A three-dimensional image capturing device, comprising:

a light source that radiates a light beam;

an image device that accumulates signal charge corresponding to a quantity of light received on said image device;

a distance information sensing processor that controls radiating of a distance measuring light beam from said light source to a measurement subject and detects distance information which relates to said measurement subject by receiving a reflected light beam from said measurement subject, said distance information sensing processor radiating said distance measuring light beam from said light source a predetermined number of times, so that signal charge is accumulated in said image device due to each radiation of said distance measuring light beam; and

a data transmitting processor that controls radiating of a data transmitting light beam from said light source, so that data is transmitted to an external device,

wherein said light source outputs the distance measuring light beam and the data transmitting light beam in a single operation,

wherein a series of said distance measuring light beams and a series of said data transmitting light beams are superposed so that said data transmitting light beams are radiated in the intervals between said distance measuring light beams and timing for

radiating said data transmitting light beams is based upon the timing of said radiation of said distance measuring light beams.

Claims 2-11. (Canceled)

12. (Currently Amended) A device according to claim [[11]] 1, wherein said transmitting light beams comprise a pulse beam representing binary data having predetermined digits.

13. (Currently Amended) A device according to claim [[10]] 1, wherein said distance measuring light beams and said data transmitting light beams are superposed by pulse-width modulation of said light beams, so that said light beams comprise two types of pulse beams having different widths, which represent binary data of said data and are concurrently used for detecting said distance information.

14. (Currently Amended) A device according to claim [[9]] 1, wherein said distance measuring light beam is radiated before an accumulation of signal charge in said image device starts, and signal charge corresponding to said distance information of said measurement subject is accumulated during a period from a beginning of said accumulation to an end of said reflected light beam reception at said image device.

15. (Previously Presented) A device according to claim 14, wherein said data transmitting light beam is radiated prior to said distance measuring light beam.

16. (Previously Presented) A device according to claim 15, wherein said data transmitting light beam is radiated during a period, from an end of said accumulation of said signal charge in said image device to a beginning of said distance measuring light beam radiation.

17. (Currently Amended) A device according to claim [[8]] 1, wherein said distance measuring light beams comprise a synchronizing signal of an optical transmission system.

18. (Currently Amended) A three-dimensional image capturing device, comprising:

a light source that radiates a light beam;

an image device that accumulates signal charge corresponding to a quantity of light received on said image device;

a distance information sensing processor that controls radiating of a distance measuring light beam from said light source to a measurement subject and detects distance information which relates to said measurement subject by receiving a reflected light beam from said measurement subject; and

a data transmitting processor that controls radiating of a data transmitting light beam from said light source, so that data is transmitted to an external device,

wherein said light source outputs the distance measuring light beam and the data transmitting light beam in a single operation,

~~A device according to claim 1,~~ wherein an accumulation of said signal charge in said image device is synchronously carried out ~~with~~ while said data transmitting light beam is output, so that said data transmitting light beam can be used as said distance measuring light beam, and said data transmitting light beams and said distance measuring light beams are superposed with each other,

wherein said distance information sensing processor radiates said distance measuring light beams from said light source a predetermined number of times, so that

signal charge is accumulated at said image device due to each radiation of said distance measuring light beams, and

wherein said distance information sensing processor is actuated and said data transmitting light beams are radiated during a distance measuring period, in which said distance measuring light beams are repeatedly radiated said predetermined number of times, said distance measuring period comprising:

a data transmitting period, in which said distance measuring light beams and said data transmitting light beams are superposed and radiated; and

a supplemental light emitting period, in which distance measuring light beams are radiated so as to supplement the number of said distance measuring light beams radiated in said data transmitting period, by a number sufficient to obtain said predetermined number of times.

Claim 19. (Canceled)

20. (Previously Presented) A device according to claim 18, wherein a series of said data transmitting light beams represents binary data.

21. (Previously Presented) A device according to claim 18, wherein said data transmitting light beams comprise pulse modulated laser beams.

22. (Previously Presented) A device according to claim 21, wherein a data sequence transmitted by said data transmitting light beams comprises a partition signal that delimits said data sequence by predetermined binary digits of the data.

23. (Original) A device according to claim 18, wherein said image device comprises a plurality of photoelectric conversion elements that accumulates signal

charge corresponding to a quantity of light received, and signal charge holding units disposed adjacent to each of said photoelectric conversion elements.

24. (Original) A device according to claim 23, wherein the accumulation of said signal charge in said image device begins with a fall of an electric charge discharging signal that discharges the charge accumulated in said photoelectric conversion elements, and ends with a fall of an electric charge transfer signal that transfers said signal charge accumulated in said photoelectric conversion elements to said signal charge holding units.

25. (Original) A device according to claim 24, wherein said electric charge transfer signal rises approximately simultaneously with the fall of said electric charge discharging signal.

26. (Previously Presented) A device according to claim 25, wherein said electric charge transfer signal is generated by combination of a standard electric charge transfer signal comprised of periodic pulse signals and a data synchronizing pulse signal generated synchronously with the fall of a pulse signal of said data sequence;

said electric charge discharging signal is generated by combination of said data synchronizing pulse signal and a standard electric charge discharging signal having a period which is the same as said standard electric charge transfer signal and from which the phase is delayed by a half period; and

said data synchronizing pulse signal is synchronized with said standard electric charge discharging signal and the pulse width of said data synchronizing pulse signal is the same as one period of said standard electric charge transfer signal.

27. (Previously Presented) A device according to claim 18, wherein the accumulation of said signal charge starts when a pulse of said data transmitting light beam falls.

28-34. (Canceled)